

Geographical Study of Flood Affected Settlements in Jalgaon District (M.S.)

Abstract

In the present paper an attempt has been made to study the flood affected settlements of Jalgaon district. Floods are one of the most widespread and destructive natural disaster. It is an overflow of an expanse of water that submerges land. The district consist 11765 sq.km.area with a population 4229917as per 2011 census. The district having 15 tahsils with 1519 rural settlements. With the help of data available there are 265 settlements are badly affected by floods occurred in the study area. There is a need of immediate rehabilitation of flood affected settlements.

Keywords: Flood, Settlements, Rehabilitation.

Introduction

Jalgaon district is located in the northern part of Maharashtra state. The district has occupied the total area of 11765 Sq. Kms. The district is located between 20 0 12' North to 20 0 25' North latitudes and 74 0 55' East to 76 0 28' East longitudes. (Fig. No.1) The district has occupied 3.82 % of the total area of the state and population was 4229917 as per 2011 census. The sex ratio was 360.

The district comprises 1519 settlements and 08 urban Settlements. The population of the district is unevenly distributed in 15 tahsils namely, Jalgaon, Bhusawal, Yaval, Raver, Muktainagar, Amalner, Chopda, Erandol, Parola, Chalisgaon, Jamner, Pachora, Bhadgaon, Dharangaon and Bodwad. The district having 15 tahsils with 1519 rural settlements. With the help of data available there are 265 settlements are badly affected by floods occurred in the study area. There is a need of immediate rehabilitation of flood affected settlements.

Data Base and Methodology

Data Base

Data regarding flood affected settlements is obtained from secondary sources .i.e. Census and socio economic review of Dhule district.

Literature Survey

The available literature on the above topic of research is scanned from various research papers, Books and Journals.

Laboratory Work

The laboratory work includes presentation of flood affected settlements in tabular form and it is presented with the help of maps.

Objective

The main objective of the present study is to assess the impact of flood on the settlements of study area.

Study Area

Jalgaon district is located in the northern part of Maharashtra state. The district has occupied the total area of 11765 Sq. Kms. The district is located between 20 0 12' North to 20 0 25' North latitudes and 74 0 55' East to 76 0 28' East longitudes. (Fig. No.1) The district has occupied 3.82 % of the total area of the state and population was 4229917 as per 2011 census. The sex ratio was 360.

The district comprises 1519 settlements and 08 urban Settlements. The population of the district is unevenly distributed in 15 tahsils namely, Jalgaon, Bhusawal, Yaval, Raver, Muktainagar, Amalner, Chopda, Erandol, Parola, Chalisgaon, Jamner, Pachora, Bhadgaon, Dharangaon and Bodwad.

Physiography

Jalgaon district belongs to the Deccan uplands of the Maharashtra state; it is distinguished from the rest of the upland District by westward drainage. The Tapi river passes through the centre of the District from East to West. The rest of the upland region is drained by Major River to the East. The Tapi and its tributaries drain the Jalgaon region to the west towards Arabian Sea. The landscape is typically that of the Deccan lavas

Patil Dinesh Nishikant

Research Scholar,
Deptt. of Geography,
Kisan Junior College,
Parola,Jalgaon



Patil Shivaji Bansilal

Head and Research Guide,
Deptt. of Geography,
Late Annasaheb R.D. Deore
Arts and Science College,
Mhasadi, Dhule

with residual hill ranges and broad valley, with trap dykes introducing sharp local contrast as small chains of hillocks. Thus the region includes varied topographical features and landscapes consisting of wild hills, barren plain, low lying rocky hills and bad land topography near major river banks. The study region is a part of Tapi Basin and hence, it is completely drained by Tapi and her tributaries.

Soil

All the soils of this district are wholly derived from the trap or basalt. But they differ from the rest of

the Deccan trap soil area in that they are mostly alluvial in origin, having been transported from the mountain ranges. The soil of the district is derived from trap rock. On the basis of depth, texture and color, soil of the region can broadly be classified into three major type's like-

1. Deep black cotton soil
2. Medium black soil
3. Coarse shallow soil

Jalgaon District: Location Map

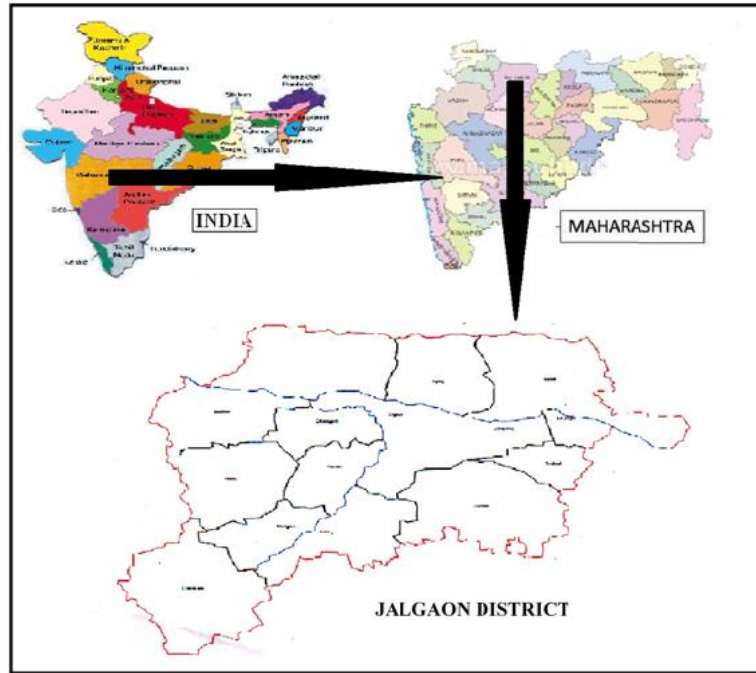


Fig No.-1

Climate

The climate of the district is generally dry except in the monsoon. The year may be divided into four seasons.

1. The cold season (December to February).
2. Hot season (March to May).
3. Monsoon season (June to September).
4. Post-monsoon season (October and November).

Distribution of Flood Affected Settlements in the Study Region

Study area comprises fifteen tahasils, namely Jalgaon, Bhusaval, Yaval, Raver, Muktainagar, Amalner, Chopda, Erandol, Parola, Chalisgaon, Jamner, Pachora, Bhadgaon, Dharangaon, Bodwad, including Tapi, Girna, Purna, Panzara, Bori, Aner and Vaghur river system. In the present study identified 265 Settlements (Table no. 01, 02, Fig.no 02) of the 1519 settlements get prone to floods every year at the time of heavy rainfall. These settlements attracted to the researcher for the study of flood impact on such settlements. The work in the present paper is related with the flood affected settlements.

In the present study there were 265 flood affected settlements, in which 52 settlements are in Raver tehsil, this tahsil experienced problem of flood near about 44.82% settlements are flood affected on

Tapi, Suki And Ambhore river banks. 26 in Pachora tehsil situated on Girna Hivara, and Agnavati river bank. 24 in Chopda tehsil situated on Aner, Agnavati, and Tapi river bank. 27 flood affected settlements in Dharangaon tehsil situated on Anjani, Girna and Tapi river bank. 26 in Bhadgaon tehsil situated on Girna River. 26 in Chalisgaon tahsil situated on Girna river. 22 flood affected settlement in Amalner tahsil situated on Bori and Chikhli. 16 settlements in Muktainager tahsil situated on Tapi and purna river bank. 16 settlements in Yawal tahsil situated on Tapi, Suki, Sur and Mor River bank. 12 Settlements in parola tahsil situated on Bori river bank. 08 settlements in Jalgaon tahsil located on Girna river bank. 5 in Erandol tahsil situated on Girna river bank. 5 settlements in Busawal tahsil situated on Tapi river bank. 1 settlement in jammer tahsil situated on Kang river bank. In the study area maximum flood affected settlements are situated on Girna, Tapi and Bori river bank, respectively 83, 72 and 32. Very less number of floods affected settlements are located on, Ambhore, Agnavati, Anjani, Suki, Sur, Kang, Aner, Mor and Hivara river banks. Only Bodwad tahsil is free from flood hazard. All these settlements are located below H.F.L., at the time of flood all settlements loose their contact. Flood affected on human settlements, agriculture, transport network, animals. There is

urgent need of rehalitation of these settlements to safer place, which is free from flood hazard. There is

also need to construct safety walls along the river banks.

Table - 1
Jalgaon District: Flood Affected Settlements

Sr. No.	Tahsils	Total Village	Name of River	Flood Affected Settlement		Percentage
1	Raver	116	Tapi Ambhore Suki	24 09 19	52	19.62
2	Pachora	128	Girna Hivra Agnavati	14 08 04	26	09.81
3	Dharangaon	89	Anjani Girna Tapi	19 05 03	27	10.19
4	Chopda	119	Tapi Aner Agnawati	17 06 01	24	09.06
5	Bhadgaon	60	Girna	26	26	09.81
6	Chalisgaon	143	Girna	26	26	09.81
7	Amalnear	154	Bori Chikhali	20 02	22	
8	Muktainagar	85	Tapi	16	16	06.03
9	Yawal	91	Tapi Suki Sur Mor	10 04 01 01	16	08.30
10	Parola	116	Bori	12	12	04.53
11	Jalgaon	87	Girna	08	08	03.02
12	Erandol	65	Girna	05	05	01.88
13	Bhusawal	53	Tapi	05	05	01.88
14	Jamner	160	Kang	01	01	00.37
15	Bodwad	53	-----	----	00	00.00
	Total	1519	-----	----	265	100

Source – Computed by Researcher

Table No 02

Jalgaon District: Flood Affected Settlements on River Banks

Sr. No.	Name of River	Flood Affected Settlements
1	Girna	83
2	Tapi	72
3	Bori	32
4	Suki	23
5	Anjani	19
6	Ambhora	09
7	Hivra	08
8	Aner	06
9	Agnavati	04
10	Purna	04
11	Chikhali	02
12	Ratnawati	01
13	Sur	01
14	Mor	01
	Total	265

Source – Computed by Researcher

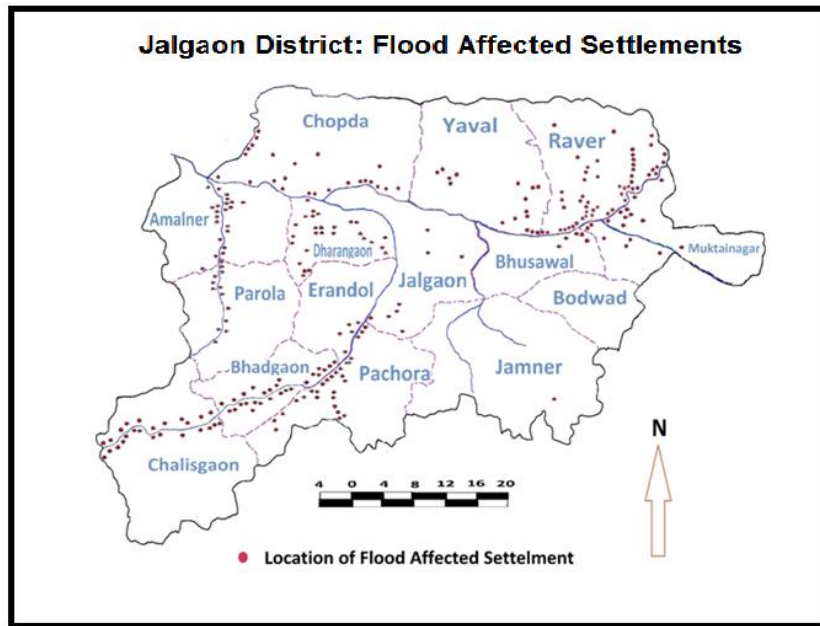


Fig no. 2

Conclusion

It is concluded from the above study that, all flood affected settlements are below H.F.L. There is a need of immediate rehabilitation of the flood affected settlements in the area which is free from floods. It is also concluded that, if the safety walls construct along the river banks are minimize the flood intensity. 20% settlements out of all flood affected settlements are located only in Raver tahsil. Raver tahsil is highly affected by floods. Out of 265 flood affected settlements 83 settlements are located on bank of river Girana, 72 settlements are located on bank of Tapi river.

References

1. Patil S.B., Patil Y.V. and Bhatewal D.P. (2007) "Geographical Study Of Place Name in Dhule district " BRL's Journal of Advances in Science and Technology Vol-X No-Ist & IInd, June – Dec.2007, Pp-78-84.
2. Patil S.B. (2008): "Geomorphology and Settlements of Dhule district (MS)" Unpublished Ph.D.Thesis submitted to North Maharashtra University, Jalgaon.
3. Chaudhari V.P. and Patil S.B. (2012) "Geographical Study Of flood affected settlements In Dhule district "Journal of research and development Vol-2 No-1, Jan –2012, Pp-8-14.
4. Socio-Economic review of Jalgaon District : 2013-14